RESPONSE UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q91175

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REMARKS

Claims 5-14 are all of the claims pending in the application.

I. Claim Rejections under 35 U.S.C. § 103(a)

The Examiner withdrew the previous rejection of claims 5-13 under 35 U.S.C. § 102(e). Claims 5-13 are now rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 6,850,808 to Yuen et al. (hereinafter "Yuen") in view of U.S. Patent No. 6,826,432 to Beck et al. (hereinafter "Beck"). Applicant respectfully traverses this rejection and respectfully requests that the Examiner reconsider the rejection at least in view of the following comments.

With respect to claim 5, the Examiner concedes that Yuen does not disclose "an instruction table for storing instructions and storing corresponding input/output types of parameters for the instructions," as recited, *inter alia*, in claim 5 (*see* page 4 of the Office Action). However, the Examiner asserts that Beck teaches the claimed instruction table. Applicant respectfully disagrees.

The Examiner alleges that element 1.10 shown in FIG. 1 of Beck is a module table containing multiple instructions, and that Beck teaches storing corresponding input/output types of parameters for the instructions (*see* page 4 of the Office Action). However, instead of teaching an instruction table for storing instructions and storing corresponding input/output types of parameters for the instructions, Beck teaches that element 1.10 is a name of a structured type objects file (*see* col. 5, lines 56-61 of Beck). Additionally, Beck teaches that a structured type object identifies a channel or an input-output module (*see* col. 5, lines 58-67 of Beck). A person of ordinary skill in the art would understand that the structured type objects disclosed by Beck

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which identify channels or input-output modules are not the same as the claimed instructions.

Moreover, Beck does not teach any other table for storing instructions and storing corresponding input/output types of parameters for the instructions, as required by the claim.

Applicant also respectfully submits that, contrary to the Examiner's assertion, Yuen does not disclose any module or unit which is the same as the claimed "search and determination means for searching the instruction table for an instruction in a code in a portion of a sequence program selected as diversion data from an existing diversion-source sequence program, to determine a corresponding input/output type of a parameter for the instruction," as recited, *inter alia*, in claim 5.

According to Yuen, a system is provided that extracts relevant control variable names from templates, and corresponding variable names from related templates are displayed to the program designer in a tabular format. The system according to Yuen allows the program designer to create substitute "interface" variable names or tags that would globally replace related control variable names throughout all of the related templates. According to Yuen, by substituting such interface tags throughout the templates, "compound" templates may be generated using the modular, lower-level templates. *See* col. 3, lines 16-30 of Yuen.

Thus, Applicant respectfully submits that Yuen does not determine corresponding input/output types of parameters for instructions, as required by the claim. Instead, the system according to Yuen merely extracts variable names from templates, presents corresponding variable names from related templates, and permits the program designer to globally replace related variable names. The process of extracting variable names and replacing variable names

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is unrelated to the claimed determining of corresponding input/output types of parameters for instructions.

Applicant respectfully disagrees with the Examiner's contention that the Automation Desktop of Yuen performs the claimed "means for" functions (see page 8 of the Office Action). Applicant respectfully submits that, at least for the reasons discussed above, Yuen does not disclose any module or unit which is the same as the claimed search and determination means for searching the instruction table for an instruction in a code in a portion of a sequence program selected as diversion data from an existing diversion-source sequence program, to determine a corresponding input/output type of a parameter for the instruction. The disclosure of Beck does not cure these deficiencies of Yuen.

Additionally, Applicant respectfully notes that this feature requires searching the instruction table for storing instructions and storing corresponding input/output types of parameters for the instructions. As discussed above, the combination of Yuen and Beck does not teach or suggest the claimed instruction table. Accordingly, the combination of Yuen and Beck cannot possibly teach searching the instruction table.

The Examiner also concedes that Yuen does not teach or suggest "a search result creating and storing means for creating and storing a search result table by combining an address in the code in the selected portion of the sequence program, with the determined corresponding input/output type," as recited, *inter alia*, in claim 5. However, the Examiner asserts that Beck discloses this feature (*see* page 4 of the Office Action). Applicant respectfully disagrees.

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In the system according to Beck, addresses in the code are not combined with determined corresponding input/output types, as required by the claim. Instead, the application program includes <u>structured symbolic variables</u> which are <u>replaced</u> by exact topological addresses (*see* col. 14, lines 31-35 of Beck).

Applicant respectfully submits that a person of ordinary skill in the art would understand that a structured symbolic variable is not the same as an address in the code—as is confirmed by Beck, which discusses replacing these symbolic variables with addresses. Thus, the application according to Beck includes structured symbolic variables, not addresses. Additionally, once the variables are replaced with addresses, Beck does not disclose any combining of the addresses with determined corresponding input/output types.

Thus, the combination of Yuen and Beck does not teach or suggested the claimed search result creating and storing means for creating and storing a search result table by combining an address in the code in the selected portion of the sequence program, with the determined corresponding input/output type.

Accordingly, at least for the reasons discussed above, Applicant respectfully submits that claim 5 is patentable over the combination of Yuen and Beck.

Applicant respectfully submits that independent claims 7 and 13 recite features similar to, although not necessarily coextensive with, the features discussed above with respect to claim 5.

Accordingly, Applicant respectfully submits that claims 7 and 13 are patentable over the combination of Yuen and Beck at least for the reasons discussed above with respect to claim 5.

Applicant respectfully submits that dependent claims 6, 9, and 11, and claims 8, 10, and 12 are

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patentable over the combination of Yuen and Beck at least by virtue of their dependency on

claims 5 and 7, respectively.

II.___ Allowable Subject Matter

Applicant respectfully submits that claim 14 should be allowable because it is not

objected to or rejected. Applicant respectfully requests that the Examiner indicate whether

or not claim 14 is allowable.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the

Examiner is kindly invited to contact the undersigned attorney at the telephone number

listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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